TWO NEW SPECIES OF THE GENUS *STENOPSYCHODES* ULMER (STENOPSYCHIDAE: TRICHOPTERA)

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Abstract

Two new *Stenopsychodes* species, *opsia* and *syrdena,* are described. Both occur in northern New South Wales.

Introduction

The genus *Stenopsychodes* Ulmer was placed by Mosely and Kimmins (1953) in the family Polycentropodidae; Ross (1967) and Schmid (1969) altered the position and placed the genus alongside *Stenopsyche* in the family Stenopsychidae, which together with family Philopotamidae are considered by Ross in the above publication as the most primitive branch of Annulipalpia, Riek (1970) included all Australian species of Polycentropodidae and Stenopsychidae in the family Psychomyiidae. The classification as suggested by Ross and Schmid has been accepted in this publication.

In the study of the family Stenopsychidae Schmid (1969) recognized six Australian species, synonymizing one (*montana* Tillyard = *venusta* Kimmins) and describing one new species (*aureoniger* Schmid) from Victoria. Specimens of this genus never have been plentiful in the collections and every new record has been of considerable importance to trace the distribution of the various species and for understanding of their relationships.

The genus is recorded from North Queensland to Victoria, but it has not been recorded from Tasmania. All known localities are situated in the mountain districts along the Australian east coast within a distance of 250 km from the coast. It is interesting to record two new species captured in one season, both occuring in the mountains of northern New South Wales, well within the known boundaries of the generic distribution.

All Australian species could be divided into two distinct colour pattern groups. One group with black and golden pattern on the anterior wings includes all species except *S. hiemalis* Tillyard and the two new ones described in this paper. These three latter species belong to a group with anterior wings pale ochraceous or fawn, with or without pale reticulation.

Genus *Stenopsychodes* Ulmer

Stenopsychodes Ulmer, 1916. *Ark. Zool.* 10: 5, figs 7-11.
Stenopsychodes Mosely & Kimmins, 1953. *Trich. Austr. & N.Z.*: 363.
Stenopsychodes Schmid, 1969. *Can. Ent.* 101: 197.

Detailed generic descriptions may be found in the above publications.
Type species: *Stenopsychodes mjöbergi* Ulmer.

Key for separating species

1. Anterior wings with black and yellow or golden pattern ..... *melanochrysa* Tillyard
   tillyardi Banks
   mjöbergi Ulmer
   montana Tillyard
–. Anterior wings fawn or ochraceous 2
2. Anterior wings with pale reticulation 3
–. Anterior wings without pale reticulation, apices darkened smoky brown ..... *opsia* sp. n.
3. Posterior margin of tergite X extended to a long narrow process ..... *syrdena* sp. n.
–. Posterior margin of tergite X short, triangular ..... *hiemalis* Tillyard

Stenopsychodes opsia sp. n.

Figs 1-5

Description

Large, bright ochraceous coloured species, anterior wings with apices darkened smoky brown; posterior wings slightly paler throughout, but apices darkened, smoky; head, antennae, entire body and legs of the same bright ochraceous colour, only tarsal segments occasionally darker, smoky brown; eyes distinct, black. Longitudinal veins of the anterior wings covered with a single row of stiff bristles, particularly noticeable and much denser on R_1, Cu_1 and 1A. Sternite V in both sexes with a lateral pore which is attached to an internal glandular sack.

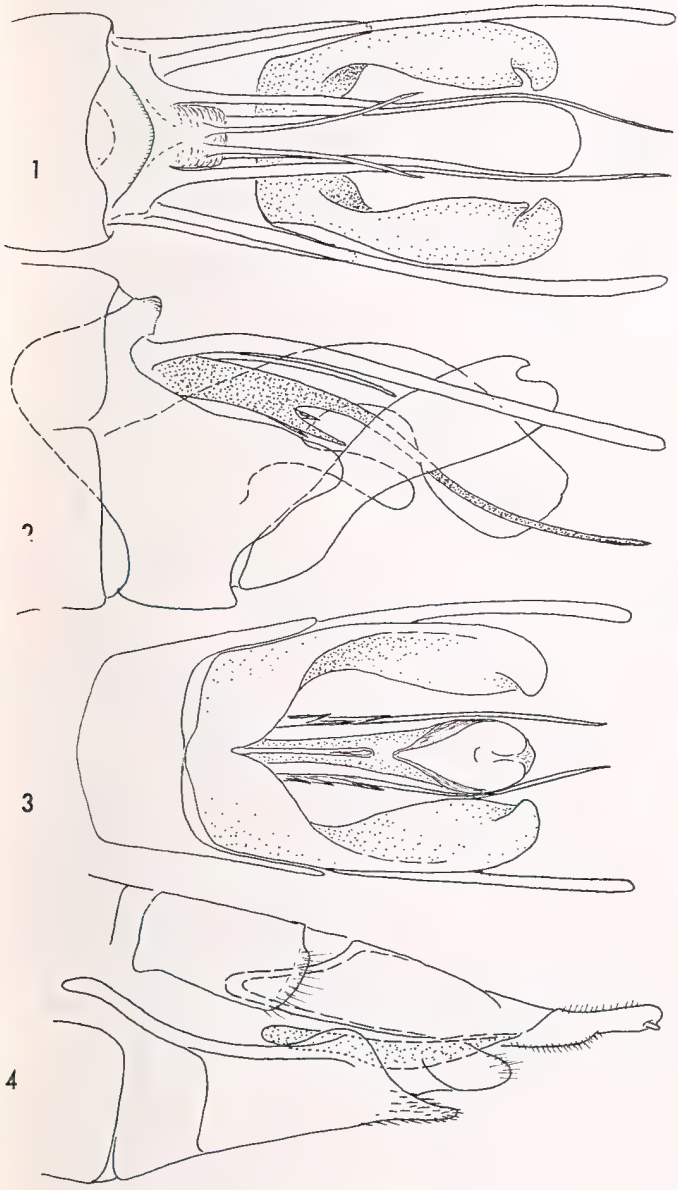
♂ genitalia: basically of the same plan as that in *Stenopsychodes montana* Tillyard, but differs in details. Lateral angle of segment IX produced posteriorly to a broad, apically rounded triangular lobe. Praeanal appendages long and slender. The posterior margin of tergite X apically extended to a pair of slender, rather transparent filaments; a pair of very long, laterally flattened processes on either side, the lower margin at the basal third in lateral view widened, tri-pointed distally. Aedeagus with laterally flattened elongate lobe at the base. Inferior appendages long, robust, dilated toward the apex with a small rounded excision.

♀ genitalia: posterior angles of tergite VIII extended into divergent, rounded, earlike flaps; sternite VIII internally with long anteriorly produced apodeme on either side; centre of posterior margin bilobed, narrowly V-shaped excision in the middle. The middle of apodemes on sternite IX curved inward laterally, rather robust.

Length of anterior wing: ♂ 11 mm, ♀ 13-14 mm.
Type material. Holotype ♂ (T 4529), *allotype* ♀ (T 4530), 2♂ *paratypes* (T 4531-T 4532) in alcohol, 1♀ *paratype* (T 4533) dry. Boonoo Boonoo River, 25 km N.E. Tenterfield, NEW SOUTH WALES. 11 Oct. 1973, A. Neboiss, (Nat. Mus. of Vic.).

Distribution

Northern NEW SOUTH WALES (known from type locality only).



FIGS 1-4. *Stenopsychodes opsia* sp.n. 1, ♂ genitalia dorsal; 2, ♂ genitalia lateral; 3, ♂ genitalia ventral; 4, ♀ genitalia lateral.

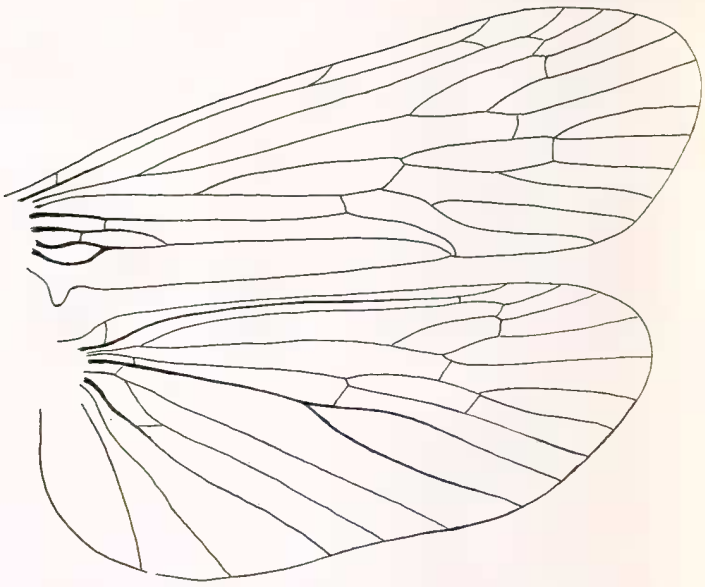


FIG. 5. *Stenopsychodes opsia* sp.n. ♀ wing venation.

Stenopsychodes syrdena sp. n.

Figs 6-9

Description

In general appearance this species closely resembles *Stenopsychodes hiemalis* Tillyard. The anterior wings are reticulated fawn and ochraceous, with evenly ochraceous space between the anal vein and posterior margin bordered with darker fawn along the Cu vein. This pattern gives a distinctive appearance in resting position when the pale anal area shows up as a light coloured dorsal line with darker colouring on either side. The head, antennae, body and legs are all ochraceous, eyes black.

♂ genitalia: similar to *hiemalis* with lateral angle of segment IX extended posteriorly into a triangular lobe. Praeapical appendages long and slender. Tergite X posteriorly extended to a long narrow process; a pair of very long laterally flattened processes on either side, at the base and below of which another small finger-like process is located. Inferior appendages robust, slightly curved, rounded at apices, the upper margin terminating in a small bluntly bipointed process.

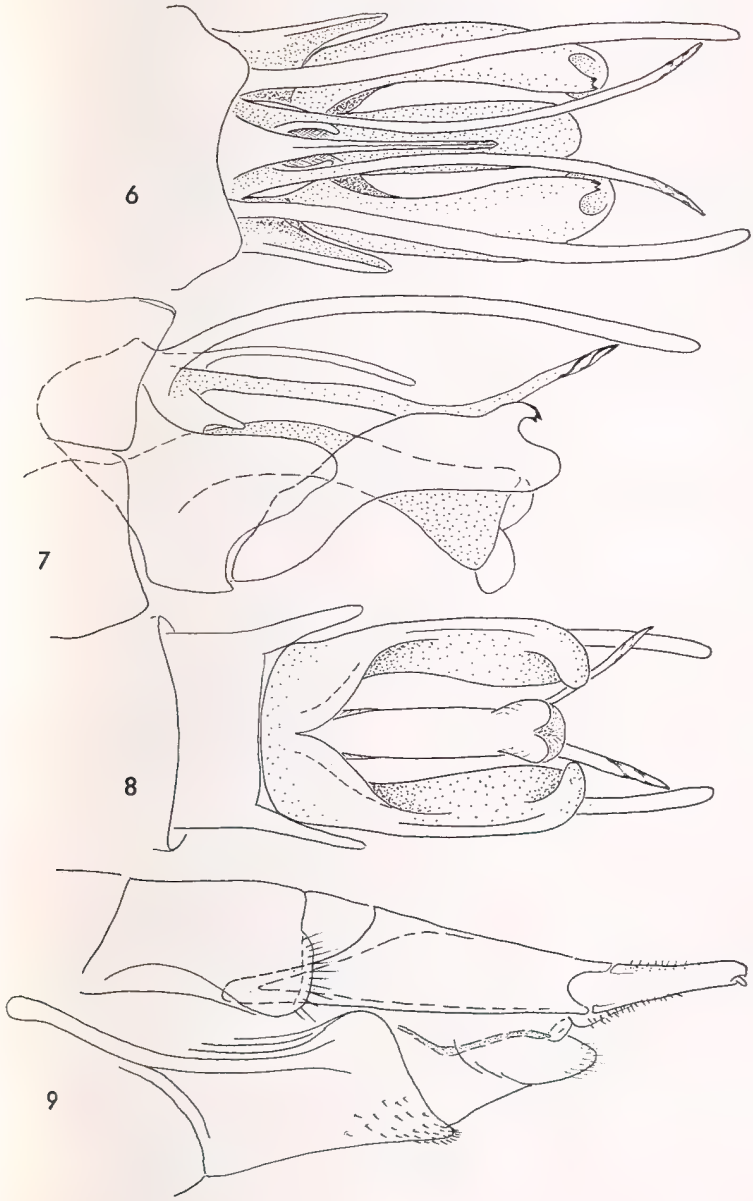
♀ genitalia: similar to that in *opsia*, but differs in the shape of sternite VIII and much smaller apodemes on sternite IX as illustrated.

Length of anterior wing: ♂ 12-13 mm, ♀ 15 mm.

Type material. Holotype ♂ (T 4534), *allotype* ♀ (T 4535), 2 ♂ *paratypes* (T 4536-T 4537) all mounted dry. Dorrigo National Park, NEW SOUTH WALES, Alt. 800m, 19 Nov. 1973, M. S. Moulds. (Nat. Mus. of Vic.).

Distribution

Northern NEW SOUTH WALES (known from type locality only).



FIGS 6-9. *Stenopsychodes syrdena* sp. n. 6, ♂ genitalia dorsal; 7, ♂ genitalia lateral; 8, ♂ genitalia ventral; 9, ♀ genitalia lateral.

Acknowledgement

The author expresses most sincere thanks to Mr M. S. Moulds for sending Trichoptera material from New South Wales, among which the new species was discovered.

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LACHESILLA TECTORUM BADONNEL (PSOCOPTERA: LACHESILLIDAE) FROM QUEENSLAND

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Smithers (1970) included the family Lachesillidae as Australian on the basis of unidentified specimens in the Australian Museum; the family had not previously been reported from this continent. This material has now been identified as *Lachesilla tectorum* Badonnel.

Lachesilla tectorum Badonnel was described from Mozambique (Badonnel, 1931). It has since been collected in a trap on the *Galathea* 95 km. from Mozambique (Thornton, 1964) and was recorded from Mauritius (as *Lachesilla pilosa*) (Badonnel, 1966) and Angola (Badonnel, 1969). The capture of this species, in yellow tray traps in Queensland, provides an interesting record. This, and the previous records, suggest that it is a species which takes flight more readily than many Psocoptera and hence easily becomes part of the aerial plankton, as does *Lachesilla pedicularia* (L.) in Europe and North America.

MATERIAL EXAMINED. QUEENSLAND. From yellow trays, 21.xii.1961-12.i.1962, 6 ♀, Mt. Nebo, 17 ♀, Samford (E. Warwick).

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